

The opinion in support of the decision being entered today is not binding precedent of the Board.

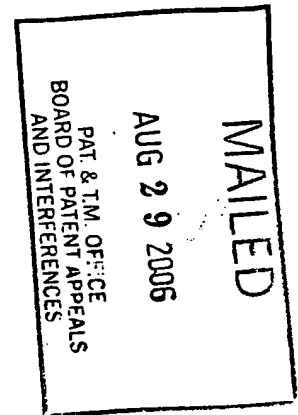
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CETIN NMI KAYA

Appeal No. 2006-1532
Application No. 09/620,649

ON BRIEF



Before OWENS, DELMENDO, and FRANKLIN, Administrative Patent Judges.

DELMENDO, Administrative Patent Judge.

DECISION ON APPEAL UNDER
35 U.S.C. § 134

1 This is a decision on an appeal under 35 U.S.C. § 134
2 (2006) from the examiner's rejection of claims 12 through 19
3 (Office action mailed June 15, 2004).^{1,2}

4 Because the examiner has made out a prima facie case of

¹ This application was the subject of a prior appeal in which we affirmed the examiner's decision to reject the same claims now on appeal. Ex parte Kaya, No. 2003-1564 (B.P.A.I. October 23, 2003), reh'g denied (December 31, 2003).

² Claim 20, the only other pending claim, stands allowed and is therefore not involved in this appeal.

unpatentability with respect to the appealed claims and since the appellant has failed to direct us to any persuasive argument or evidence in rebuttal, we affirm.

The Appealed Subject Matter

The subject matter on appeal relates to an integrated circuit having independently formed array and peripheral isolation dielectrics. (Specification at 1, lines 2-5.)

Claims 12, 14, and 18, which are illustrative of the appealed subject matter, read as follows:

12. An integrated circuit, comprising:
a first dielectric layer disposed outwardly from a substrate;
a plurality of gate stacks, each gate stack comprising:
a floating gate body disposed outwardly from the first dielectric layer;
a second dielectric region disposed outwardly from the floating gate body; and
a first polysilicon layer disposed outwardly from the second dielectric region; and
a plurality of dielectric isolation regions disposed between the gate stacks, the dielectric isolation regions formed after the formation of the gate stacks.

14. The integrated circuit of Claim 12, wherein each dielectric isolation region comprises:
an isolation oxide layer; and
an isolation dielectric layer;
the dielectric isolation region formed by:
growing approximately 200Å of oxide outwardly from the gate stacks;

depositing approximately 0.5 micrometers of oxide outwardly from and between the gate stacks; and removing at least a portion of the isolation oxide layer and the isolation dielectric layer to expose at least an outer surface of the first polysilicon layer.

18. The integrated circuit of Claim 12, wherein each gate stack further comprises a hemispherical grain poly layer disposed outwardly from the floating gate body.

Evidence

The examiner relies on the following prior art documents in support of a determination of unpatentability as to all the appealed claims, namely claims 12 through 19.

Woo et al. (Woo)	5,926,711	Jul. 20, 1999 (filed Dec. 23, 1997)
Van Buskirk et al. (Van Buskirk)	6,001,689	Dec. 14, 1999 (filed Jan. 16, 1998)
Chan et al. (Chan)	6,051,467	Apr. 18, 2000 (filed Apr. 02, 1998)

Grounds of Rejection on Review

The claims on appeal stand rejected as follows:

1. claims 12, 13, 15, and 16 under 35 U.S.C. § 102(e) as anticipated by Van Buskirk (examiner's answer mailed April 6, 2005 at 4);

- 1 2. claims 14 and 17 under 35 U.S.C. § 103(a) as
2 unpatentable over the combined teachings of Van
3 Buskirk and Chan (answer at 5-6); and
4 3. claims 18 and 19 under 35 U.S.C. § 103(a) as
5 unpatentable over the combined teachings of Van
6 Buskirk and Woo (answer at 5).

7 For the reasons discussed below, we AFFIRM all three
8 rejections.

9
10 Discussion

11 The appellant states that "[t]he [appealed] claims stand or
12 fall together." (Appeal brief filed July 14, 2004 at 3.) We
13 understand this statement to mean that the claims subject to
14 each of the three grounds of rejection stand or fall together.
15 We note, however, that the appellant does not address any
16 particular ground of rejection or claim but instead focuses on
17 the argument that Van Buskirk, which is relied upon in all three
18 rejections, is not available as prior art. (Appeal brief at 3-
19 7.) Nevertheless, we select claims 12, 14, and 18 as
20 representative of each of the three rejections, respectively,
21 and confine our discussion of the claimed subject matter (as may
22 be necessary for the disposition of this appeal) to these three

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1 selected claims. 37 CFR § 1.192(c)(7)(2004) (effective Apr. 21,
2 1995).³

3 The relevant facts of this case are not in dispute.

4 The subject application was filed on July 20, 2000,
5 claiming divisional application status under 35 U.S.C. §§ 120
6 and 121 (2001) based on prior non-provisional application
7 09/168,047, which was filed on October 7, 1998 and issued to the
8 appellant as United States patent 6,194,267 on February 27,
9 2001. (Transmittal letter filed on July 20, 2000; preliminary
10 amendment filed on July 21, 2000.)

11 On May 16, 2001, the appellant further amended the
12 application in an attempt to claim benefit of priority under 35
13 U.S.C. § 119(e)(1) based on provisional application 60/060,561
14 filed on September 30, 1997.⁴ (Amendment filed on May 16, 2001.)
15 This priority claim, however, was inappropriate because parent
16 non-provisional application 09/168,047 was not filed within
17 twelve months of the filing date of provisional application
18 60/060,561 as required under 35 U.S.C. § 119(e)(1). That is,

³ We apply the regulation in effect at the time the appeal brief was filed.

⁴ The appellant asserts, and the examiner does not challenge, that the specification in the provisional application

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1 parent application 09/168,047 was filed on October 7, 1998,
2 which is seven days after the expiration of provisional
3 application 60/060,561. Accordingly, the earliest possible
4 effective filing date for the appealed claims is the filing date
5 of the parent application, which is October 7, 1998.

6 Van Buskirk, the principal prior art reference, issued on
7 December 14, 1999 based on an application filed on January 16,
8 1998. Because Van Buskirk issued from an application filed
9 before the earliest effective filing date that may be accorded
10 to the appealed claims, it is facially prior art under 35 U.S.C.
11 § 102(e).

12 The following timeline summarizes the events in question:

13	Provisional	Van Buskirk	Expiration	Parent	Subject
14	appln.	effective date	of Provisional	appln.	appln.
15	9/30/1997	1/16/1998	9/30/1998	10/7/1998	7/20/2000
16	^	^	^	^	^
17	-----	-----	-----	-----	-----

18 The appellant does not dispute the examiner's determination
19 that Van Buskirk describes every limitation recited in appealed
20 claims 12, 13, 15, and 16. Nor does the appellant contest the
21 examiner's determination that one of ordinary skill in the art
22 would have found the subject matter of appealed claims 14, 17,

is substantially identical to the specification in the subject application. (Appeal brief at 5.)

1 18, and 19 obvious over the combined teachings of: (i) Van
2 Buskirk; and (ii) Chan or Woo.

3 Rather, the appellant relies on Pfaff v. Wells Electronics,
4 Inc., 525 U.S. 55, 60 (1998), to argue that the term "invention"
5 as used in 35 U.S.C. § 102(e) does not include any "reduction to
6 practice" requirement. (Appeal brief at 3.) According to the
7 appellant, "35 U.S.C. nowhere defines 'invention' by
8 determination solely of the questions of reduction to practice
9 or conception with diligence up to a reduction to practice
10 (actual or constructive)." (Appeal brief at 3-4.) The
11 appellant contends that the abandoned or lapsed provisional
12 application, which was filed before the effective date of the
13 Van Buskirk reference, contains an enabling description of the
14 claimed invention (i.e., "ready for patenting" as explained in
15 Pfaff) on which the appellant may rely to antedate Van Buskirk.
16 (Appeal brief at 5.) Specifically, the appellant contends that
17 patent counsel's declaration filed on July 23, 2001 "could and
18 should be considered as though it is a declaration under 37
19 C.F.R. 1.131" and that Van Buskirk is not §102(e) prior art
20 because the "declaration, considered in conjunction with the
21 Pfaff decision, provides specific reference to the provisional
22 application which was a demonstration of the claimed invention

1 herein as being ready for patenting prior to the effective date
2 of the Van Buskirk et al. reference." (Appeal brief at 6.)

3 We do not subscribe to the appellant's misapplication of
4 legal precedent and circular logic. Pfaff never holds that the
5 term "invention" means conception, as the appellant seems to
6 believe (reply brief filed May 4, 2005). When read in proper
7 context, it is clear that Pfaff defines "invention" in the
8 context of whether an actual reduction to practice is necessary
9 to trigger the on-sale bar of 35 U.S.C. § 102(b). Pfaff, 525
10 U.S. at 57 n.2. The Supreme Court held that it was not.
11 Indeed, as support for the proposition that "invention" does not
12 require actual reduction to practice, Pfaff identifies an
13 instance where the filing of an application (i.e., constructive
14 reduction to practice) was held to be sufficient. Pfaff, 525
15 U.S. at 62, n.10 (citing Alexander Millburn Co. v. Davis-
16 Bournonville Vo., 270 U.S. 390, 401-402 (1926)).⁵

17 Pfaff held:

18 [T]he invention must be ready for patenting.
19 That condition may be satisfied in at least two ways:
20 by proof of reduction to practice before the critical
21 date; or by proof that prior to the critical date the

⁵ 35 U.S.C. § 102(e), the statute upon which the examiner relies to reject the appealed claims, is said to be a codification of Millburn. Chisum on Patents § 3.07 at 3-204 (2002).

1 inventor had prepared drawings or other descriptions
2 of the invention that were sufficiently specific to
3 enable a person skilled in the art to practice the
4 invention.

5
6 Pfaff, 525 U.S. 67-68. The appellant's overreaching statement
7 that "[t]he Pfaff decision overrides the C.F.R. [i.e., 37 CFR
8 § 1.131]" (reply brief at 3) lacks merit.

9 In our view, 37 CFR § 1.131 is entirely consistent with
10 Pfaff. 37 CFR § 1.131 reads as follows:

11 (a) When any claim of an application or a
12 patent under reexamination is rejected, the inventor
13 of the subject matter of the rejected claim, the owner
14 of the patent under reexamination, or the party
15 qualified under §§ 1.42, 1.43, or 1.47, may submit an
16 appropriate oath or declaration to establish invention
17 of the subject matter of the rejected claim prior to
18 the effective date of the reference or activity on
19 which the rejection is based. The effective date of a
20 U.S. patent, U.S. patent application publication, or
21 international application publication under PCT
22 Article 21(2) is the earlier of its publication date
23 or date that it is effective as a reference under 35
24 U.S.C. 102(e). Prior invention may not be established
25 under this section in any country other than the
26 United States, a NAFTA country, or a WTO member
27 country. Prior invention may not be established under
28 this section before December 8, 1993, in a NAFTA
29 country other than the United States, or before
30 January 1, 1996, in a WTO member country other than a
31 NAFTA country. Prior invention may not be established
32 under this section if either:

33 (1) The rejection is based upon a U.S. patent
34 or U.S. patent application publication of a pending or
35 patented application to another or others which claims
36 the same patentable invention as defined in
37 § 1.601(n); or
38

1 (2) The rejection is based upon a statutory
2 bar.

3 (b) The showing of facts shall be such, in
4 character and weight, as to establish reduction to
5 practice prior to the effective date of the reference,
6 or conception of the invention prior to the effective
7 date of the reference coupled with due diligence from
8 prior to said date to a subsequent reduction to
9 practice or to the filing of the application.

10 Original exhibits of drawings or records, or
11 photocopies thereof, must accompany and form part of
12 the affidavit or declaration or their absence
13 satisfactorily explained. [Underscoring added.]

14 Thus, consistent with Pfaff's definition of "invention," an
15 applicant may establish a date of invention prior to the
16 effective date of the reference by a showing of prior conception
17 coupled with due diligence from prior to the effective date of
18 the reference to the filing of an application (i.e., a
19 description sufficiently specific to enable a person having
20 ordinary skill in the art). Consistent with the holding in
21 Pfaff, 37 CFR § 1.131 does not require actual reduction to
22 practice, although evidence of actual reduction to practice may
23 be used to antedate a reference.
24

25 A declaration may be filed to antedate a 35 U.S.C. § 102(e)
26 reference. When filed, however, the declaration must comply
27 with 37 CFR § 1.131. It must be submitted by the inventor of
28 the subject matter of the rejected claim, the owner of the
29 patent under reexamination, or the party qualified under 37 CFR

1 §§ 1.42, 1.43, or 1.47. In this case, the appellant does not
2 rely on a declaration executed by the inventor or a party
3 qualified under 37 CFR §§ 1.42, 1.43, or 1.47 as required under
4 this rule. Instead, the appellant relies on a declaration,
5 which was executed by patent counsel, alleging what are believed
6 to be the facts of the case. (Patent counsel's declaration,
7 captioned "AMENDMENT UNDER 37 C.F.R. 1.116 AND DECLARATION,"
8 filed July 23, 2001.) For this reason alone, the appellant has
9 not effectively antedated any of the applied prior art
10 references.

11 Even if we assume that patent counsel's declaration
12 satisfies the rule, which it does not, the appellant has not
13 established "reduction to practice prior to the effective date
14 of the reference, or conception of the invention prior to the
15 effective date of the reference coupled with due diligence from
16 prior to said date to a subsequent reduction to practice or to
17 the filing of the application." Here, the appellant has shown
18 conception of the invention prior to the effective date of the
19 reference (January 16, 1998), as evidenced by the filing of the
20 provisional application on September 30, 1997. Nevertheless,
21 proof of this conception must be coupled with proof of due
22 diligence from prior to January 16, 1998 to the filing of the

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1 parent application (October 7, 1998). Again, however, the
2 appellant does not direct us any evidence establishing due
3 diligence during the relevant time period, which is from just
4 prior to January 16, 1998 to October 7, 1998. That the
5 appellant missed the statutory deadline for claiming benefit of
6 an earlier filing date under 35 U.S.C. § 119(e)(1) based on the
7 provisional application strongly suggests that due diligence was
8 lacking during at least part of the time period from just prior
9 to the effective date of reference to the filing of the parent
10 application. The appellant has not identified persuasive
11 evidence establishing diligence for the seven days from the
12 expiration of the lapsed provisional application to the filing
13 of the parent application. In re Mulder, 716 F.2d 1542, 1545,
14 219 USPQ 189, 193 (Fed. Cir. 1983) ("A liberal construction of
15 the rule, which is clearly intended to benefit applicants, will
16 permit applicants to show diligence from just prior to the date
17 of the reference to their convention filing date, rather than
18 all the way from their proven conception date, but liberality
19 cannot be extended to the point of eliminating all proof of
20 diligence, no matter how short [two days] the period to be
21 covered.").

1 The description in the provisional application could have
2 been properly used as part of the evidence needed to establish
3 that the invention was "ready for patenting" (i.e., as a
4 constructive reduction to practice in the context of 37 CFR
5 § 1.131) before the effective date of Van Buskirk. Here,
6 however, the appellant permitted the provisional application to
7 lapse. The appellant's arguments that equate "ready for
8 patenting" with the mere existence of an enabling description of
9 the invention in an abandoned or lapsed provisional application
10 amount to an attempt to circumvent the statutory scheme of 35
11 U.S.C. §§ 111(b), 119, 120, and 121, thus rendering many of the
12 provisions including non-revivable abandonment of a provisional
13 application or the copendency and timeliness requirements a
14 nullity.⁶ Cf. In re Costello, 717 F.2d 1346, 1350, 219 USPQ 389,
15 391 (Fed. Cir. 1983) ("It has long been settled, and we continue
16 to approve the rule, that an abandoned application, with which
17 no subsequent application was copending, cannot be considered a
18 constructive reduction to practice...It is inoperative for any
19 purpose, save as evidence of conception.").

⁶ In this regard, we point out that a provisional application is not submitted for examination. 35 U.S.C. § 111(b)(8). Thus, it does not necessarily constitute evidence

1 The appellant urges that a prior art reference may be
2 antedated by ways other than that set forth in 37 CFR § 1.131.
3 (Appel brief at 6.) The appellant, however, does not cite any
4 persuasive legal authority for this proposition. Moreover, a
5 fundamental rule underlying a 35 U.S.C. § 102(e) rejection is
6 that the applicant whose claims are rejected would not be the
7 "first inventor" in the face of the reference United States
8 patent. Millburn, 270 U.S. at 402. Accordingly, it is
9 reasonable to require that the showing of facts necessary to
10 antedate a 35 U.S.C. § 102(e) reference be similar to those
11 required to show priority of invention under 35 U.S.C. § 102(g).

12 For these reasons, we uphold the examiner's rejections.

13

14 Summary of Decision

15 In sum, we AFFIRM the examiner's rejections of:

- 16 1. claims 12, 13, 15, and 16 under 35 U.S.C. § 102(e) as
17 anticipated by Van Buskirk;
18 2. claims 14 and 17 under 35 U.S.C. § 103(a) as
19 unpatentable over the combined teachings of Van
20 Buskirk and Chan; and

that the invention described therein was "ready for patenting"
or was constructively reduced to practice at the time of filing.

3. claims 18 and 19 under 35 U.S.C. § 103(a) as
unpatentable over the combined teachings of Van
Buskirk and Woo.

The decision of the examiner to reject appealed claims 12
through 19 is therefore AFFIRMED.

Time for Taking Action

No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a)(1)(iv).

AFFIRMED

Terry J. Owens
Terry J. Owens)
Administrative Patent Judge)

Romulo H. Delmendo
Romulo H. Delmendo) BOARD OF PATENT
Administrative Patent Judge) APPEALS AND

Beverly A. Franklin
Beverly A. Franklin) INTERFERENCES
Administrative Patent Judge)

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